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			2155	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)			
Office Action Summary		10/083,876	RIORDAN, KENNETH			
		Examiner	Art Unit			
		Oanh Duong	2155			
Period fo	The MAILING DATE of this communication apport Reply	pears on the cover sheet with the o	correspondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Donsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication of period for reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tircuit apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>05 S</u>	eptember 2007.				
2a)⊠	This action is FINAL . 2b) This action is non-final.					
3)[Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposit	ion of Claims					
4)⊠	Claim(s) <u>1,2,4,5,8-11 and 13-17</u> is/are pending	g in the application.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
6)⊠	6) Claim(s) <u>1, 2, 4, 5, 8-11, 13-17</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
8)[]	Claim(s) are subject to restriction and/o	r election requirement.	•			
Applicat	ion Papers					
9)[The specification is objected to by the Examine	er.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11)[The oath or declaration is objected to by the Ex	caminer. Note the attached Office	e Action or form PTO-152.			
Priority (under 35 U.S.C. § 119					
. —	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority	s have been received. s have been received in Applicat	ion No			
	application from the International Burea					
* (See the attached detailed Office action for a list	of the certified copies not receive	ed.			
Attachmer		_				
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail D				
3) Infor	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Informal F 6) Other:				

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DETAILED ACTION

- Claims 1, 2, 4, 5, 8-11, 13-17 are presented for examination.
 Claims 3, 6, 7, 12, and 18-19 have been canceled.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metz, US 5,978,855, in view of Yong et al. (hereafter, Yong), US 5,541,919, and further in view of Levitan, Us 6,965,913 B2.

Regarding claim 1, **Metz** teaches a network software downloading method (i.e., method for downloading software through a network, col. 5 lines 14-17), comprising:

communicating terminal unique information (i.e., download initiation) for downloading of common software content (i.e., software) from the network to a plurality of terminals (i.e., terminals 100, Fig. 1) in the network on corresponding dedicated communication channels (i.e., two-way narrowband data communication network 16, Fig. 1) for each terminal (i.e., col. 8 lines 19-30, col. 11 lines 11-27 and col. 19 line 64-col. 20 line 35);

sending a message to the plurality of terminals on corresponding dedicated communication channels to receive the common software content on a shared channel (i.e., the network 16 provides two-way narrowband data communication between the

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terminals 100 and text server 16. The text server 18 transmits an instruction/message to the terminals 100 to select a channel carrying the software, col. 8 lines 19-30 and col. 19 line 64- col. 20 line 35);

transmitting the common software content from the network to the plurality of terminals on the shared communication channel (i.e., broadcast channel) after sending the message (Fig. 1 col. 8 lines 19-60 and col. 11. lines 7-32: Metz discloses application files are downloaded/transmitted from software server 12 to terminal(s) 100 via a broadcast channel); and

multiplexing software content on the shared communication channel (multiplexes the data into output stream, col. 12 lines 16-35).

Metz does not explicitly multiplexing a plurality of different common software content on the shared communication channel, and dynamically adjusting the plurality of different common software content multiplexed on the shared communication channel in proportion to a changing number of the plurality of terminals receiving the plurality of different common software content.

Yong teaches system and device wherein multiplexing and sending the packets to a shared communication link are provided (seen in abstract). Yong teaches multiplexing bitstreams on the shared communication channel (i.e., multiplexing bitstreams into variable lengh packets and sending packets to an output channel, col. 2 lines 55-64), dynamically adjust content/bitstreams multiplexed on the shard communication channel (i.e., dynamically adjust sizes of packets for information streams, col. 10 lines 1-13).

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It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the process of dynamically adjusting the bitstreams multiplexed on the shared communication channel as taught by Yong. One would be motivated to do so to achieve efficient bandwidth sharing (Yong, col. 4 lines 12-13).

Levitan teaches system wherein content delivery in broadcast radio is provided (see abstract). Levitan teaches adjust the content on the shared communication channel in proportion to a changing number of the plurality of terminals receiving the content (Applicant's specification defines, "the software content multiplexed on the shared communication channel is adjusted dynamically by adjusting a transmission time of each of the plurality of software files" in page 7 lines 25-27. Levitan discloses each file is transmitted for a period of time proportional to a number of clients requested the file, col. 7 lines 8-20. Therefore, Levitan does teach adjust the content on the shared communication channel in proportion to a changing number of the plurality of terminals receiving the content as defined in applicant's specification).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of **Metz** to adjust the content on the shared communication channel in proportion to a changing number of the plurality of terminals receiving the content as taught by **Levitan**. One would be motivated to do so to overcome both slow downloading and traffic jams (**Levitan**, col. 2 line 57-58).

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Regarding claim 8, **Metz-Yong-Levitan** teaches the method of claim 6, dynamically adjusting the plurality of different common software content based on a priority factor (**Young**, col. 3 lines 27-37).

4. Claims 2, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metz in view Yong, Levitan and Brassil et al. (hereafter, Brassil), US 2002/0187776 A1.

Regarding claim 2, **Metz** teaches the method of claim 1, receiving a request for the common software from a plurality of terminals on corresponding dedicated communication channel for each terminal (*i.e.*, terminal(s) 100 transmit(s) the input through the data channel (i.e., dedicated communication channel) to the text server 18, Fig. 1 col. 20 lines 23-25),

transmitting the common software content from the network to the plurality of terminals making the request on the shared communication channel after receiving the request (i.e., the software server 12 transmits selected information through the broadcast channel, col. 20 lines 30-35);

The combination of teachings of **Metz, Young and Levitan** does not explicitly teach receiving confirmation from each of the plurality of terminals that received the software content on corresponding dedicated communication channels for each terminal after transmitting.

Brassil teaches teach receiving confirmation from each of the plurality of terminals that received the software content on corresponding dedicated communication

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channels for each terminal after transmitting (i.e., confirmation that the download has been completed is received by the service provider, pages 2-3 paragraph [0034).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of teachings of **Metz**, **Young and Levitan** to receive confirmation from each of the plurality of terminals that received the software content for each terminal after transmitting as taught by **Brassil**. One would be motivated to do so to enable user's account to be credited once confirmation the download has been completed is received (Brassil, page 2 paragraph [0034], lines 4-7).

Regarding claim 4, Metz-Young-Levitan-Brassil teaches the method of claim 1, receiving confirmation from each of the plurality of terminals that received the common software content on corresponding dedicated communication channels for each terminal after transmitting (i.e., Brassil, confirmation should be sent over the slow speed network, page 3 paragraph [0034] line 1-4).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Metz**, in view of **Yong**, **Levitan**, and **Wiehler**, US 6,850,915 B1.

Regarding claim 5, **Metz** teaches the method of claim 1,

transmitting/exchange data message relating to an interactive service from the network to a plurality of terminals over corresponding dedicated channels for each terminal (i.e., provide two-way, low-speed data communications capacity, e.g., for

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signaling and/or interactive text service between text server 12 and terminal(s) 100, Fig. 1, col. 5 lines 18-21);

transmitting the common software content from the network to the plurality of terminals on the shared communication channel after exchanging data message (Fig. 1 col. 8 lines 19-60 and col. 11. lines 7-32: Metz discloses application files are downloaded/transmitted from software server 12 to terminal(s) 100 via a broadcast channel).

The combination of teachings of **Metz, Young and Levitan** does not explicitly teach transmitting data message such as a digital signature from the network to terminal.

Wiehler teaches providing/transmitting a digital signature from the network to (col. 5 line 34- 61).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of teachings of **Metz, Young and Levitan** to provide digital signature to terminal before software downloading as taught by **Wiehler.** One would be motivate to do so to enhance the security of the system (Wiehler, col. 6 lines 17-19).

6. Claims 9-11, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka** et al. (hereafter, Tanaka), U.S. Patent No. **6,671,509** B1 in view of **Yong** et al. (hereafter, Yong), US 5,541,919 and **Levitan**, US 6,965,913 B2.

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Regarding claim 9, **Tanaka** teaches a radio communication network software loading method (i.e., transmitting/downloading software from base station to mobile communication unit(s) via a radio link, Fig. 1 col. 2 lines 22-39 and col. 12 lines 15-28), comprising:

transmitting software content from a radio communication network to a plurality of terminals in the network by multiplexing the software content on a shared communication channel (broadcast channel) received by the plurality of terminals (col. 3 lines 47-51, col. 4 lines 48-58, col. 8 lines 11-61, and col. 12 lines 14-28: Tanaka discloses software is transmitted from base station to mobile station(s) via radio link based on a time-division multiplex transmission scheme using a broadcast channel); and

Tanaka does not explicitly teach the software content comprises a plurality of files; dynamically adjusting the software content multiplexed on the shard communication channel by adjusting a number of times each of the plurality of files is transmitted.

Yong teaches system and device wherein multiplexing and sending the packets to a shared communication link are provided (seen in abstract). Yong teaches dynamically adjust content multiplexed on the shard communication channel (col. 2 line 48-col. 3 line 36).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of **Metz** to dynamically adjust content

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multiplexed on the shared communication channel as taught by **Young**. One would be motivated to do so to achieve efficient bandwidth sharing (Yong, col. 4 lines 12-13).

Levitan teaches system wherein content delivery in broadcast radio is provided (see abstract). Levitan teaches content comprises a plurality of files (col. 5 lines 52-55); and adjusting a number of times each of the plurality of software files is transmitted (col. 3 lines 27-32: Levitan discloses the server continues to repeatedly (i.e., in a number of times) transmit each Internet file proportional to a number of clients requested that file. Therefore, number of times the file is transmitted is dynamically adjusted/changed according to a number of clients requested the file).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of **Tanaka** to dynamically adjust a number of times each of the plurality of files is transmitted taught by **Levitan**. One would be motivated to do so to overcome both slow downloading and traffic jams (**Levitan**, col. 2 line 57-58).

Regarding claim 10, **Tanaka** teaches the method of claim 9, wherein software content is multiplexed on the shared channel from a radio device management server (base station) in communication with the radio communication network (i.e., the system software item may be divided and then transmitted from base station to mobile station(s) via radio channels, col. 6 lines 5-10 and col. 15 lines 58-67).

Tanaka does not explicitly teach dynamically adjusting the software content multiplexed on the shard communication channel.

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Yong teaches system and device wherein multiplexing and sending the packets to a shared communication link are provided (seen in abstract). Yong teaches dynamically adjust content multiplexed on the shard communication channel (col. 2 line 48-col. 3 line 36).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Metz to dynamically adjust content multiplexed on the shared communication channel as taught by Young. One would be motivated to do so to achieve efficient bandwidth sharing (Yong, col. 4 lines 12-13).

Regarding claims 11, Tanaka-Yong-Levitan teaches the method of claim 9, the software content comprises a plurality of different software files, dynamically adjusting the software content multiplexed on the shared communication channel by adjusting a transmission time of each of the plurality of software files (Yong, col. 5 lines 7-32).

Regarding claim 15, Tanaka-Yong-Levitan teaches the method of claim 9, the software content comprises a plurality of software files (Tanaka, a plurality of system software items, col. 3 lines 49-51), dynamically adjusting the content multiplexed in the shared communication channel based on at least one of file size and a number of the plurality of terminals receiving the software files (Yong, col. 3 lines 27-59).

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Regarding claim 17, **TanaKa-Yong-Levitan** teaches the method of claim 9, fragmenting the software multiplexed on the shared channel by packetizing the software content (Yong, col. 3 lines 2-33).

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka**, in view of **Yong**, **Levitan** and **Jennings** et al. (hereafter, Jennings), U.S. Pub. No. **2002/0099842** A1.

Regarding claim 13, **Tanaka** teaches the method of claim 13, the software content comprises a plurality of software files (i.e., a plurality of system software items, col. 3 lines 49-51), dynamically adjusting the software content multiplexed on the shared communication channel (i.e., the system software item may be divided /adjusted and then transmitted, col. 15 lines 58-67).

Tanaka-Yong-Levitan does not explicitly teach priory the transmission of software files that generates greater amounts of revenue relative to the transmission of software files that generate lesser amounts of revenue.

Yong teaches information bitstreams are prioritized and multiplexed for efficient transmission (col. 2 lines 48-52). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Tanaka to prioritize the information bitstreams as taught by Yong. One would be motivated to do so to provide efficient transmission over the network (Yong, col. 2 line 52).

Jennings teaches content that generate more revenue receives priority during processing (page 24 paragraph [0300]). It would have been obvious to one of ordinary

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skill in the art at the time of the invention was made to modify the combination of teachings of **Tanaka**, **Young and Levitan** to designate the content/file that generate more revenue to receive priority during the processing as taught by **Jennings** because it would allow the system, such as in Tanaka, to provide a high quality service to the user who costs more.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka**, in view of **Yong**, **Levitan and Park** et al. (hereafter, Park), U.S. Patent No. **6,744,738**B1.

Regarding claim 14, **Tanaka** teaches method of claim 9, the software content comprises a plurality of software files (i.e., a plurality of system software items, col. 3 lines 49-51), dynamically adjusting the software content multiplexed on the shared communication channel (i.e., the system software item may be divided /adjusted and then transmitted, col. 15 lines 58-67).

The combination of **Tanaka**, **Yong and Levitan** does not explicitly teach prioritizing the transmission of more essential software files over the transmission of less essential software files.

Park teaches the wireless transmission system wherein a data transmission determiner for determining the transmission priority is provided (see abstract). Part teaches prioritizing the transmission of more essential data over the transmission of less essential data (col. 3 lines 7-42).

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It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of teachings of **Tanaka**, **Yong**, and **Levitan** to prioritize the transmission of more essential data over the transmission of less essential data as taught by **Park**. One would be motivated to do so to allow data to be transmitted faster than the conventionally technology when the bandwidth of the allowed channel is small and the amount of data to be transmitted per unit time is large (**Park**, col. 4 line 33-38).

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka** et al. (herein, Tanaka), U.S. Patent No. **6,671,509** B1, in view of **Yong, Levitan and Hamabe**, U.S. Pub. No. **2002/0115467** A1.

Regarding claim 16, **Tanaka** teaches the method of claim 9, receiving confirmation from each of the plurality of terminals that received the software content for each of terminal after transmitting (i.e., the base station receives download completion notice from the mobile station(s), col. 6 lines 5-10 and col. 7 lines 46-61).

The combination of teachings of **Tanaka**, **Yong**, **Levitan** does not explicitly teach receiving confirmation on corresponding dedicated channel.

Hamabe teaches receiving confirmation on corresponding dedicated channel after transmitting (i.e., when sending of data is completed, the mobile station uses the DPCH/dedicated channel to notify base station of end of data reception, page 7 paragraph [0077]).

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It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of teachings of **Tanaka**, **Yong**, **and Levitan** to transfer confirmation via dedicated channel from mobile station as taught by **Hamabe**. One would be motivated to do so to prevent an increase in interference wave power resulting from an increase in transmission power of the dedicated channel to increase line capacity while increasing reliability of control information for carrying out high peed data communication from base station to mobile station(s) (**Hamabe**, page 4 paragraph [0027]).

Response to Arguments

10. Applicant's arguments filed 09/05/2007 have been fully considered but they are not persuasive.

In the remarks, applicant argued in substances that

(A) Levitan does not disclose multiplexing a plurality of different common software content on the shared communication channel".

As to point (A), In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

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(B) Levitan fails to disclose dynamically adjusting the common software content multiplexed on the shared communication channel in proportion to a changing number of the plurality of terminals receiving the plurality of different common software content.

As to point (B), Yong teaches dynamically adjusting data multiplexed on the shared channel (col. 10 lines 1-13). Levitan teaches adjusting the data transmitted on the shared communication channel in proportion to a changing number of the plurality of terminals receiving the plurality of different common software *content* (i.e., server repeatedly broadcasts each Internet file/content proportional to a number of clients requested that file, col. 3 line 57-col. 4 line 9). Therefore, the combination of teachings of Yong and Levitan does teach dynamically adjusting the content multiplexed on the shared communication channel in proportion to a changing number of the plurality of terminals receiving the content.

(C) The examiner's motivation for combination is misplaced.

As to point (C), In response to applicant's argument that motivation for combination is misplaced, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case,

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Metz teaches system for downloading data such as software content through a shared/broadcast channel (col. 9 lines 17-20). Young teaches dynamically adjusting data multiplexed on the shared channel (col. 3 lines 27-34). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the step of dynamically adjusting data multiplexed on the shared channel as taught by Yong into the system of downloading data through the shared channel of Metz in order to achieve efficient bandwidth sharing (Yong, col. 4 lines 12-13). Levitan further teaches adjusting data transmitted on the shared channel in proportion to a number of clients requested the data (col. 4 lines 5-8). It would have been obvious to one of ordinary skill in the art at the time of the invention was made incorporate the step of adjusting data transmitted on the shared channel in proportion to a number of clients requested the data as taught by Levitan into the system of downloading data of Metz in order to avoid slow downloading (Levitan, col. 2 line 57-58).

(D) Prior art (Metz, Young, and Levitan) fail to disclose dynamically adjusting the plurality of different common software content based a priority factor.

As to point (D), Metz teaches data including software content (col. 26 lines 59-62). Young teaches dynamically adjusting data based on a priority factor (col. 3 lines 27-34). Therefore, the combination of Metz and Young does teach dynamically adjusting the plurality of different common software content based a priority factor.

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(E) Levitan does not suggest dynamically adjusting the software content multiplexed on the shared communication channel by adjusting a number of times each of the plurality of software files is transmitted.

As to point (E), Young teaches dynamically adjust data multiplexed on the shared communication channel (col. 3 lines 27-34). Levitan teaches adjusting data, such as software content, transmitted on the shared channel in proportion to a number of clients requested the data (col. 4 lines 5-8 and col. 6 lines 54-67). Therefore, the combination of teachings of Young and Levitan does teach suggest dynamically adjusting the software content multiplexed on the shared communication channel by adjusting a number of times each of the plurality of software files is transmitted.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh Duong whose telephone number is (571) 272-3983. The examiner can normally be reached on Monday- Friday, 9:30PM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

O. Duong / Primary Examiner November 13, 2007